

Testimony of Patricia Wood  
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on Water Quality and Contamination

*Long Island's underground aquifers and surface waters, which provide drinking water for millions, recreational activities and sources of food for us and the wildlife with whom we share this island, are being impacted by a common enemy: excess nitrogen.*

*Nitrogen is absolutely crucial to life — yet, in excess, it can also choke the life out of aquatic ecosystems, creating excess algae blooms, coastal dead zones, the loss of biodiversity and the destruction of shellfish beds... and even sicken people, especially vulnerable populations.*

*Over the past fifty-plus years we have released so much nitrogen into Long Island's soil and water through nutrient-laden wastewater, and through excessive and improper fertilizer use by farmers, professional landscapers and homeowners, that nitrogen levels are at a tipping point.*

*Groundwater movement, rainwater and irrigation systems, snowmelt and storms can carry fertilizer nutrients into our drinking water and miles away it may show up as dangerous algae in our bays and inland ponds and lakes. The challenge has been making our population aware that seemingly harmless activities often create serious ecological disruptions in distant places.*

While it will take significant time and expense to see the impacts of critical and necessary infrastructure changes dealing with nutrient-laden wastewater, there is something we can do right now to address the issue of excess nitrogen on Long Island - something that will require minimal funding and cause

minimal disruption to businesses and homeowners. I refer to legislation that would **prohibit the sale or use of fertilizer products with a nitrogen content of more than 10% (by weight) and require that 50% of that nitrogen be water-insoluble or slow-release.** It is estimated that 6-11% of the nitrogen on Long Island comes from fertilizer use. Typical brands of lawn fertilizer sold for use on Long Island contain 18-32% nitrogen by weight.

High-nitrogen, water-soluble fertilizers are a "locally controllable source" of degradation to the water resources of Long Island, where significant amounts of glacially deposited sandy soils are subject to rapid water infiltration, percolation, and leaching of nutrients. These soil characteristics mean that normal agronomic practices of fertilization do not necessarily apply on Long Island.

Some East coast regions with similar hydrogeology and/or marine environments have attempted to address the fertilizer issue with legislation, but there have been no real success stories to date. Notably among them are Nantucket, Martha's Vineyard, several towns on Cape Cod, Chesapeake Bay (Maryland), and Pinellas County, FL

Legislation in these other coastal regions typically limit fertilizer applications by using the formula just mentioned that requires homeowners and landscapers to apply no more than the .9 pounds of nitrogen per 1,000 square feet at any one time, and no more than 3 pounds per 1,000 square feet per year.

These laws fail for two simple reasons: first, few landscapers and fewer homeowners can accurately determine the precise square footage of their lawns, or calibrate their spreaders to deliver a precise amount of fertilizer, especially since every fertilizer product is slightly different. And, most people buy a bag of fertilizer and apply it until the bag is gone, on the theory that fertilizer is a *good* thing.

Second, there is no agency with the ability to monitor and enforce this type of complicated legislation. *How can it be determined exactly how many pounds*

*of nitrogen per thousand square feet have been applied to a homeowner's property without knowing the size of the bag, the exact product used, the type of spreader and even the setting on the spreader?*

With the realization that the laws are inherently difficult to enforce, each region is now grappling with more aggressive education and certification efforts and hoping the public and the industry will comply. In both Martha's Vineyard and Nantucket (who suffer very similar problems we have here on Long Island), they are pursuing the idea of a "Martha's Vineyard Blend" or "Nantucket Blend" of fertilizer made especially for the islands. One of the major fertilizer distributors to the industry on the islands told them it was absolutely possible. My conversation with a representative of the Nantucket BOH (which is tasked with enforcement) said limiting the nitrogen content in a bag would be the gold standard. Why not on Long Island?

Lawn fertilizer restriction is very difficult to accomplish on a local basis; despite the fact that we have some strong champions here on Long Island who understand the issue and support the idea of limiting the amount of nitrogen in fertilizer products sold or used on Long Island, only the State has sufficient power to push back against industry and enact such protective legislation.

As a non-profit that has received recognition from both the EPA and the DEC for our healthy lawn program and our work with professional landscapers on best practices for turf and landscape maintenance, we are aware of the many effective, low nitrogen, mostly water-insoluble fertilizer products available for purchase and use. I have attached a list of products that meet these requirements – Exhibit A.

We also encourage the use of other sources of healthy nitrogen made available to lawns through cultural practices, such as leaving clippings on lawns, or the use of corn gluten meal and seed formulas enhanced with the new varieties of low growing clover which fixes nitrogen in the soil.

We ask that the legislature consider legislation for the counties of Long Island that prohibits the sale or use of lawn fertilizer products with a nitrogen

content of more than 10% (by weight) and require that 50% of that nitrogen be water –insoluble.

Note: If you are requiring a lower nitrogen lawn fertilizer product, even if it is misapplied or spilled onto impervious surfaces (which is a common occurrence), the damage will be far less to the ecosystem. This bold initiative would absolutely see an immediate reduction in nitrogen loading across the Island.

This bold initiative would absolutely see an immediate reduction in nitrogen loading across the Island and will allow homeowners and the professional landscaping community to continue utilizing effective products that are protective of our fragile waters and our health, while continuing to enjoy their lawns and their successful businesses, respectively.

All of us currently living on Long Island will benefit and future generations will thank you for your vision.

**Commercial Lawn Fertilizer Products**  
**(10% nitrogen or less, slow release, no phosphorus)**

Bradfield Organics Luscious Lawn 9-0-0 with corn gluten

Healthy Grow 9-0-0 Gold with Corn Gluten

North Country Organics Pro-Booster 10-0-0

North Country Organics Natural No-Phos 6-0-6

Renaissance 6-0-0 Renaissance Premium Fertilizer

Renaissance 6-0-1 Renaissance Premium Fertilizer

Renaissance 8-0-1 Renaissance Premium Fertilizer

Renaissance 9-0-0 Natural Lawn Fertilizer

Ringer Lawn Restore II Fertilizer 10-0-6

Jobe's Phosphorous-Free Lawn Food 7-0-3

Purely Organic Lawn Food Fertilizer 10-0-2

Espoma Organic Lawn Food – Spring Booster 8-0-0

Espoma Organic Lawn Food – All Season 8-0-0

Espoma Organic Lawn Food – Summer Revitalizer 8-0-0

Espoma Organic Lawn Food – Fall Winterizer 8-0-5

Espoma Organic Weed Preventer Plus Lawn Food 9-0-0

Jonathan Green Organic Weed Control Plus Fertilizer 9-0-0

Woodstream Safer Brand Lawn Restore Fertilizer 10-0-6